CLAIMS

What is claimed is:

1. A networking interface device for coupling a system host having one of a plurality configurations to a network medium, comprising:

a peripheral component interconnect (PCI) interface for coupling the interface device to a system host configured with a PCI based system bus interface;

a medium independent interface (MII) for coupling the interface device to a system host configured with a media access controller (MAC) based system bus interface;

a PCI control block for managing network data packet traffic exchange between the interface device and the system host; and

an MII attachment coupled between the MII and the PCI control block, the MII attachment reformatting management data packets such that the MAC based system bus interface appears to be a PCI based system bus interface by the PCI control block.

2. The networking device of claim 1, wherein the MII attachment has a first receive buffer and a second receive buffer, and network data packets received over the network medium are written to the first receive buffer and, when the first receive buffer is full or after the expiration of a predetermined amount of time, the data written to the first receive buffer is transmitted to the system host.

3. The networking device of claim 2, wherein as data is transmitted from the first receive buffer, newly incoming network data packets are written to the second receive buffer.

4. The networking device of claim 1, wherein the interface device determines whether the interface device is operably coupled to a system host having a PCI based system bus interface or a MAC based system bus interface by detecting the presence of at least one of a management data clock (MDC) or a

management data input/output (MDIO) signal transmitted from an MII on the system bus interface to the MII of the interface device.

5. The networking device according to claim 1, further comprising a buffer management device (BMU) having an active state for bursting data packet traffic via the PCI interface when the interface device is coupled to a PCI based system bus interface and a passive state for continuously passing data packet traffic via the MII when the interface device is coupled to a MAC based system bus interface.

6. The networking device according to claim 5, wherein the PCI control block generates a suspend burst signal upon the detection of the network device being coupled to the MAC based system bus interface, the suspend burst signal being sent to the BMU and instructing the BMU to enter the passive state.

7. The networking device according to claim 5, further comprising at least one physical layer device (PHY) connected to the BMU via a receive processing block and a transmit processing block, the PHY for carrying out networked communications with a remote system host in accordance with a home phoneline network alliance (HPNA) specification via the network medium.

8. A method of operably coupling a system host to a network medium using an interface device, the system host having either a peripheral component interconnect (PCI) based system bus interface or a media access controller (MAC) based system bus interface, the method comprising the steps of:

detecting the type of system bus interface of the system host;

receiving management data from the MAC based system bus interface for controlling network data packet exchange between the MAC based system bus interface and the interface device; and

reformatting the management data for receipt and processing by a PCI control block.

9. The method according to claim 8, further comprising the steps of:

reconfiguring a buffer management unit (BMU) from an active state to a passive state;

directing network data packets from the BMU to an MII attachment having a first receive buffer and a second receive buffer; and

buffering received network data packets with the MII attachment.

10. The method according to claim 9, further comprising the steps of writing network data packets received over the network medium to the first receive buffer and transmitting the written data to the system host when the first receive buffer is full or after the expiration of a predetermined amount of time.

11. The method according to claim 10, wherein as data is transmitted from the first receive buffer, newly incoming network data packets are written to the second receive buffer.

12. The method according to claim 9, wherein the step of detecting the type of system bus interface of the system host includes detecting the presence or absence of at least one of a management data clock (MDC) or a management data input/output (MDIO) signal transmitted from a medium independent interface (MII) on the system bus interface to an MII of the interface device, the presence of the at least one of the MDC or the MDIO indicating the system host has a MAC based system bus interface.

13. The method according to claim 9, wherein upon detecting the MAC based system bus interface carrying out the further step of generating a suspend burst signal used to reconfigure the BMU from the active state for bursting data packet traffic for the PCI based system bus interface to the passive state for continuously passing data packet traffic for the MAC based system bus interface.